

Richard Bowdler Sharpe's "*A monograph of the Alcedinidæ: or, family of kingfishers*" 1868-1871

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ABSTRACT: A minor correction is made in respect of the plate contents compared to Zimmer (1926) and some historical notes are provided. The plates issued part by part are listed in a clear table. Zimmer pointed to names that might have first appeared in different works and, for these, precedence is here determined. Attention is also drawn to a disclosed cancellation which may well have followed a partial correction in which a name was supposedly over-stickered and to subsequent replacements of plates. Because of nomenclatural rules in use at the time the relevance of names in Linnaeus (1758) is revealed. Sharpe's annotated list of 'Literature' has been examined and found helpful in explaining some of Sharpe's placements in synonymy, which may be expected to have often been preliminary. Finally, the riddle of the name *Ceyx rufidorsa* Strickland, 1846, that bedevilled Sharpe is pursued in an Appendix bringing the history of this up to date.

KEYWORDS: dates of publication, cancellans, cancellandum, nomenclature, history, *Systema Naturae* editions, Richard Bowdler Sharpe, Johannes Gerardus Keulemans, *Ceyx rufidorsa* ¹

INTRODUCTION

"*A monograph of the Alcedinidæ: or, family of kingfishers*" by Richard Bowdler Sharpe (1847-1909) was issued in 15 parts (including two double-parts) over the period 1868-1871, as set out by Zimmer (1926: 575-576), see Table 1. The work was self-published and each part was priced at 12 shillings and sixpence ² (Finsch, 1870: 380). It was well illustrated by Johannes Gerardus Keulemans (1842-1912, but Sharpe was not pleased with the work of some of the copyists. ³ The print run was 200 copies (Anon., 1869b). ⁴

Richard Bowdler Sharpe was born on 22 November 1847 and it is astonishing that this seminal work was begun by a young man of only 20. For a better understanding of how Sharpe was able to manage this, the account of his life in Wikipedia ⁵ is recommended. While the subject is the work in question and dates of publication, this introduction comments on

¹ Over the years this has been spelled *-dorsa*, *-dorsus* and *-dorsum* reflecting a problem assigning a gender to the name *Alcedo*. We use the spellings in the context of their use by the authors concerned.

² It will be interesting to determine whether the price here cited appeared on the wrappers.

³ Eventually Sharpe had eight daughters who became skilled colourists.

⁴ A List of Subscribers probably issued in 1871 accounts for over 160 sets including presentation copies to British and Austrian royalty. The Duke of Edinburgh listed was Queen Victoria's second son, Alfred, who predeceased his mother. Others listed include Bernard Quaritch and J. Wheldon of 60 Great Queen Street (founder of Wheldon and Wesley).

⁵ https://en.wikipedia.org/wiki/Richard_Bowdler_Sharpe (accessed 20.09.2020).



TANYSIPTERA SABRINA.

Figure 1. *Tanysiptera sabrina* Kiaoa Kinfisher – Plate 103 by John Gerrard Keulemans, published in January 1871 in the final double part of Sharpe's monograph.

Sharpe's previous experience, and sections are added at the end deal with issues that arose during this study.

At this period European ornithologists were expected to follow the strictures of the "Stricklandian Code" (Strickland *et al.*, 1843). The search for names was, in principle, restricted by this to work dating from the 12th edition of Linnaeus's *Systema Naturae* in 1766 or later, although reference to the *Ornithologia sive synopsis methodica* of Brisson (1760) was accepted.⁶

To undertake this work Sharpe had two key dependencies:

- Access to published works: as a staff member at the Zoological Society of London he was encouraged by Philip Lutley Sclater and the Council of the ZSL to make full use of the Society's library.⁷ The *Monograph* contains (pp. xlix-lxxi) a 'Literature' list which details 142 works dating from 1766 to January 1871. It is remarkably comprehensive and is discussed further towards the end of this article.
- Access to specimens was recognised as a need and I think, implicitly as a problem because his opinions are often tentative. In his Introduction (pp. i-xlvi) he gave a general report on what he had seen. However, he had to be content with a limited success; there was much that he would have wanted to see and could not. Opportunities for comparisons will also have been limited (as some of his synonymy reveals).

Sharpe started work in 1863 at W.H. Smith & Son ("J.E.H", 1910: 352) leaving in early 1886 for employment with Bernard Quaritch, the antiquarian booksellers, for a short time before joining the Zoological Society of London as Assistant Librarian in January 1867, and leaving in January 1872 – seven months before joining the British Museum as a Senior Assistant (Sharpe, 1906: 482), where he replaced George Robert Gray who had died in May, 1872.

Having been a visitor to the museum, Sharpe wrote of this that: "My own experience, as a boy, was that in the bird-section at least, a student was an unwelcome visitor, and his appearance on the scene was resented. This was certainly my own case, for I had always but a short time to spare, as it was seldom that I could get leave of absence from the Zoological Society, even for an hour" (Sharpe, 1906: 84). The Zoological Society of London had dispersed its own collection in 1855. In contrast although the reassignment of the collection of the Asiatic Society to the British Museum was agreed in 1860, most specimens were not incorporated in the British Museum until 1880 (Sharpe, 1906: 395-396), and Sharpe inspected kingfisher specimens held at the India Museum at Fife House in Whitehall where his reception was much kinder. During the period from about 1867 to 1872 Sharpe assembled, or added to, a collection of his own. In the *Monograph* Sharpe mentions some specimens as being in his in own collection, and Sharpe (1906:481) details the collections he sold to the dealer Gerrard for resale to the museum, because Civil Service rules did not allow him to

⁶ Apparently not examined by Sharpe (see his List of Literature).

⁷ See paragraph 1 of "Literature" in the *Monograph*: an annotated list in chronological order from 1766 to 1870.

retain a private collection after joining the museum staff.⁸ Other specimens were examined (see p. 1 of the subject work), including those collected by Wallace, some seen in Amsterdam, others selected in Leiden which he was allowed to take back to England on loan, as well some sent from Turin by Salvadori, from Milan by Count Turati, from Berlin by Peters, and yet others from von Pelzeln in Austria.

The initial response to the book was extremely good, as shown by the comments in *The Ibis* by Sclater (= Anon., 1868, 1869a).⁹

THE CONTENT OF THE PARTS

Issued at thirteen points in time it consists of 15 parts. Neither the plates nor the text pages were originally numbered. This was not unusual for a work in progress when an author was still undecided on how to arrange the sequence of taxa involved (see, for example, Gray's *Genera of Birds*). Sharpe's background will have made him conversant with this potential approach.

Dates of publication were apparently printed on the wrappers they were reported by Coues (1879: 710-711) and repeated by Zimmer (1926: 575-576). Article 8.1 of the International Code of Zoological Nomenclature (1999: 6) states that a work "must be issued for the purpose of providing a public and permanent scientific record" but wrappers were always likely to be discarded when a part work was bound; however, the purpose of the work is clear and so the kingfisher newly named in the final double part of this work should be dated using the date reported by Coues.¹⁰

Zimmer was able to draw on Coues (1879: 710-711) for the content of the parts; but Zimmer did not mention the list of contents and the list of plates (both of which refer to the species that appears in the one plate that Zimmer did not list (pl. 42). In fact, Zimmer mentioned plate 21 twice, once in Part VI and once in Part VIII and one of these was plate 42. For his plate numbers Zimmer's source was Coues, but for grouping the plates per part Zimmer drew on the *Zoological Record*. Apart from the erroneous plate number there is just one other mistake – a listed page number which is probably just a typographical error. Zimmer wrote "the plates not included in this list are of indeterminate position" – which seems to refer only to the "Plate of generic characters".

An important element in Sharpe's work was the removal from synonymies of names actually bestowed on jacamars by European workers who initially did not distinguish between the two groups – since seen as families (Alecudinidae and Galbulidae).

The 120 plates depict 121 named forms and four species were described but not depicted; these were *Ceryle lugubris* (p. 59) text with Part VI; *Alcyone diemensis* (p. 47) and *Ceryle stellata* (p. 77) texts in Part XII; and *Pelargopsis malaccensis* (p. 107) text in Part XIV/XV. Each of these was given its own text pages. The first three of these names had been published

⁸ Gerrard purchased 129 specimens many of which were kingfishers and this lot was catalogued in 1874. Sharpe (1906: 481).

⁹ For further *Ibis* reviews see Anon. (1870a) and Anon. (1871), and Salvin & Sclater (1872).

¹⁰ But the purpose may be less clear; see Dickinson *et al.* (in press) for an application to the Commission seeking to recognise a specific set of wrappers as part of the work and therefore to be able, from the evidence of dating their first appearance, the dates of new scientific names provided in the parts (all from the wrappers for parts 1 to 20 of the *Nouveau Recueil de Planches Coloriées d'oiseaux* of Temminck & Laugier.

Table 1. Species depicted in the parts of Sharpe’s “*Monograph of the Alcedinidæ*”

Part No.	Publication dates	Plate and text page numbers (as given by Coues, 1879)
I	July 1, 1868 8 pll.	23: <i>Ceryle alcyon</i> (p. 79); 28: <i>Ceryle superciliosa</i> (p. 93); 44: <i>Ceyx cajeli</i> (p. 127); 45: <i>Ceyx Wallacei</i> ¹¹ (p. 129) ; 62: <i>Halcyon pileata</i> (p. 169); 71: <i>Halcyon dryas</i> (p. 193); 96: <i>Carcineutes pulchellus</i> (p. 251); 99: <i>Caridonax fulgidus</i> (p. 257)
II	October 1, 1868 8 pll.	25: <i>Ceryle Cabanisi</i> (p. 87); 38: <i>Ceyx solitaria</i> (p. 115); 39: <i>Ceyx melanura</i> (p. 117); 41: <i>Ceyx rufidorsa</i> ¹² (p. 121); 46: <i>Ceyx lepida</i> (p. 131); 97: <i>Carcineutes melanops</i> (p. 253); 118: <i>Cittura sanghirensis</i> (p. 299); 119: <i>Cittura cyanotis</i> (p. 301)
III	January 1, 1869 8 pll.	37: <i>Ceyx philippensis</i> (p. 113); 40: <i>Ceyx tridactyla</i> (p. 119); 55: <i>Syma torotoro</i> (p. 151); 56: 153 <i>Syma flavirostris</i> (p. 153); 58: <i>Halcyon badia</i> (p. 159); 104: <i>Tanysiptera nympha</i> (p. 269); 116: <i>Dacelo Gaudichaudi</i> (p. 295); 117: <i>Dacelo tyro</i> (p. 297)
IV	April 1, 1869 8 pll.	17: <i>Alcyone cyanopectus</i> (p. 55); 27: <i>Ceryle inda</i> (p. 91); 47: <i>Ceyx uropygialis</i> (p. 133); 49: <i>Ispidina madagascariensis</i> (p. 137); 50: <i>Ispidina leucogastra</i> (p. 139); 51: <i>Ispidina picta</i> (p. 141); 68: <i>Halcyon senegaloides</i> (p.187) ¹³ ; 120: <i>Melidora macrorrhina</i> (p. 303)
V	July 1, 1869 8 pll.	7: <i>Alcedo semitorquata</i> (p. 27); 9: <i>Alcedo beryllina</i> (p. 31); 10: <i>Corythornis vintsioidesi</i> (p. 33); 24: <i>Ceryle amazonia</i> (p. 83); 48: <i>Ceycopsis fallax</i> (p. 135); 53: <i>Ispidina ruficeps</i> (p. 147); 66: <i>Halcyon orientalis</i> (p. 181); 69: <i>Halcyon cyanoleuca</i> (p. 189)
VI	October 6, 1869 8 pll.	11: <i>Corythornis cristata</i> (p. 35); 12: <i>Corythornis caeruleocephala</i> ¹⁴ (p. 39); 16: <i>Alcyone pusilla</i> (p. 53); 18: <i>Ceryle guttata</i> (p. 57); 20: <i>Ceryle maxima</i> (p. 67); 21: <i>Ceryle Sharpii</i> ¹⁵ (p. 71); 52: <i>Ispidina natalensis</i> (p. 145); 100: <i>Tanysiptera sylvia</i> (p. 259)
VII	January 1, 1870 8 pll.	3: <i>Alcedo grandis</i> (p. 19); 14: <i>Alcyone pulchra</i> (p. 45) ; 22: <i>Ceryle torquata</i> (p. 73) ; 61: <i>Halcyon cyanoventris</i> (p. 167); 65: <i>Halcyon albiventris</i> (p. 177); 70: <i>Halcyon senegalensis</i> (p. 191); 72: <i>Halcyon malimbica</i> (p. 195); 113: <i>Dacelo Leachi</i> (p. 289)

¹¹ Spelled *wallacei* on the plate and plate list, but *wallacii* at the head of the text.

¹² Plate 41 in part II was originally said to depict *Ceyx tridactyla*, a name which recurs in Part III. This refers to events needing clarification; see text below under “The Cancellans and Cancellandum”.

¹³ Coues (1879: 711) gave this as p. 157 but his sequence shows this to have been a typographical error.

¹⁴ The spelling *coeruleocephala* is used in the plate while the text is captioned *caeruleocephala*.

¹⁵ Spelled thus by Coues (1879: 710), the correct original spelling, but Sharpe while using this in his text had *Ceryle sharpei* as the plate caption.

Part No.	Publication dates	Plate and text page numbers (as given by Coues, 1879)
VIII	April 1, 1870 ¹⁶	30: <i>Pelargopsis amauroptera</i> (p. 97); 31: <i>Pelargopsis leucocephala</i> ¹⁷ (p. 99); 32: <i>Pelargopsis Gouldi</i> (p. 101); 35: <i>Pelargopsis burmanica</i> (p. 109); 36: <i>Pelargopsis floresiana</i> (p. 111); 42: <i>Ceyx sharpei</i> ¹⁸ (p. 123); 114: <i>Dacelo cervina</i> (p. 291); 115: <i>Dacelo occidentalis</i> (p. 293)
IX	July 1, 1870	2: <i>Alcedo bengalensis</i> (p. 11); 8: <i>Alcedo euryzona</i> (p. 29); 29: <i>Pelargopsis melanorhyncha</i> (p. 95); 57: <i>Halcyon coromanda</i> (p. 155); 60: <i>Halcyon gularis</i> (p. 165); 63: <i>Halcyon erythrogastra</i> (p. 171); 76: <i>Halcyon lazuli</i> (p. 203); 106: <i>Tanysiptera hydrocharis</i> (p. 273)
X/XI	October 1, 1870	4: <i>Alcedo moluccensis</i> (p. 21); 5: <i>Alcedo asiatica</i> (p. 23); 13: <i>Alcyone azurea</i> (p. 41); 26: <i>Ceryle americana</i> (p. 89); 43: <i>Ceyx Dillwynni</i> (p. 125); 59: <i>Halcyon smyrnensis</i> (p. 161); 75: <i>Halcyon nigrocyanea</i> (p. 201); 77: <i>Halcyon diops</i> (p. 205); 78: <i>Halcyon Macleayi</i> (p. 207); 79: <i>Halcyon pyrrhopygia</i> (p. 211); 80: <i>Halcyon cinnamomina</i> (p. 213); 83: <i>Halcyon concreta</i> (p. 219); 88: <i>Halcyon sordida</i> (p. 233); 98: <i>Monachalcyon monachus</i> (p. 255); 108: <i>Tanysiptera Margarethae</i> (p. 277); 112: <i>Dacelo gigas</i> (p. 285)
XII	November 1, 1870	34: <i>Pelargopsis gurial</i> (p. 105); 64: <i>Halcyon semicaerulea</i> (p. 173); 87: <i>Halcyon chloris</i> (p. 229); 89: <i>Halcyon Forsteni</i> (p. 235); 91: <i>Halcyon sancta</i> (p. 239); 94: <i>Todirhamphus recurvirostris</i> (p. 247); 101: <i>Tanysiptera doris</i> (p. 263); 107: <i>Tanysiptera acis</i> (p. 275)
XIII	December 1, 1870	1: <i>Alcedo ispida</i> (p. 1); 6: <i>Alcedo quadribrachys</i> (p. 26); 67: <i>Halcyon chelicutensis</i> (p. 183); 81: <i>Halcyon australasiae</i> (p. 215) ; 85: <i>Halcyon sacra</i> (p. 223); 92: <i>Halcyon funebris</i> (p. 243); 93: <i>Todirhamphus veneratus</i> (p. 245); 95: <i>Todirhamphus tutus</i> (p. 249)
XIV/XV	January 1, 1871	15: <i>Alcyone Lessoni</i> (p. 49) and <i>Alcyone affinis</i> (p. 51); 19: <i>Ceryle rudis</i> (p. 61); 33: <i>Pelargopsis Fraseri</i> (p. 103); 54: <i>Ispidina Lecontei</i> (p. 149); 73: <i>Halcyon albicilla</i> (p. 197); 74: <i>Halcyon leucopygia</i> (p. 199); 82: <i>Halcyon Lindsayi</i> (p. 217); 84: <i>Halcyon Hombroni</i> (p. 221); 86: <i>Halcyon Juliae</i> (p. 227) ; 90: <i>Halcyon vagans</i> (p. 237); 102: <i>Tanysiptera Emiliae</i> (p. 265); 103: <i>Tanysiptera sabrina</i> (p. 267); 105: <i>Tanysiptera Ellioti</i> (p. 271); 109: <i>Tanysiptera nais</i> (p. 279); 110: <i>Tanysiptera galatea</i> (p. 281); 111: <i>Tanysiptera Riedeli</i> (p. 283)

¹⁶ Zimmer (1926: 576), confused by two species named *sharpii*, cited pl. 21 as included in part VIII; a mistake for pl. 42. This, listed correctly by Coues, is demonstrated by the lists of plates and contents which cite numbers (although neither plates nor pages bore printed numbers).

¹⁷ Coues (1879: 710) mistakenly listed this as *leucocapilla*.

¹⁸ Spelled *sharpii* by Coues (1879: 711), however Salvadori's original spelling was *sharpei*, which was used in Sharpe's plate caption, whereas his text used *sharpii*.

before this work but the fourth was first published in the final double part. Sharpe (1873: 53) confirmed the appearance of this within Parts XIV/XV on January 1st 1871.

The texts all begin with a synonymy¹⁹ and at the foot of the first page of the text for each taxon is a list of other references.

Sharpe's text on 'Classification' (pp. iii-xxi) includes keys and lists of genus names that fell into synonymy. Of this text Zimmer wrote that "The introduction contains a review of the group and presented some emendations of the text, including the description of a new genus, *Myioceyx*."²⁰ However, this name was not brought into use in the Contents list or the List of Plates where *Myioceyx ruficeps* is named *Ispidina ruficeps*.

Zimmer added: "The text contains the description of a new species, *Tanysiptera emiliae* in Pt. XIV."²¹ Several other species, described by the author in the *Proceedings of the Zoological Society*, are redescribed here with references to the *Proceedings* without pagination, and the dates of these numbers of the *Proceedings* and of the *parts* of this work are very close, requiring further investigation to determine the priority of reference. The species in question are *Ceyx wallacii*, *Cittura sanghirensis*, *Pelargopsis gouldi*, *P. floresiana* and *P. burmanica*."

Salvin & Sclater (1872) announcing the apparent completion of the work, noted the absence – so far – from the published work of a chapter on anatomy that was to have been supplied by James Murie.

The purpose of this note is to compare the appropriate dates; to this end the references have the names and pagination of new taxa added including, where that belongs, the later use of the name.

- 1) *Ceyx wallacii*: this is first named in the *Monograph* (Sharpe, 1868a). There were dual original spellings (see footnote 7). Sharpe himself acted as First Reviser by using the spelling *wallacii* in the *Proceedings* (Sharpe, 1868b). The author the first review Anon. (1868: 473) mentioned that taxon name and spelling although referring to the figure which is labelled *wallacei*.
- 2) *Cittura sanghirensis*: this is first named in the *Proceedings* (Sharpe, 1868b)
- 3) *Pelargopsis gouldi*, *Pelargopsis floresiana* and *Pelargopsis burmanica* are all first named in the *Monograph*, part VIII in April 1870.
- 4) *Tanysiptera emiliae* is named in the final two-part issue on January 1, 1871.

NAMES FROM 1758 AND 1766 AND THEIR USE IN "PETERS CHECK-LIST"

Sharpe published several decades before the zoological community decided to take the 10th edition of the *Systema Naturae* by Linnaeus (1758) in place of the 12th edition of Linnaeus (1766). The 12th edition was selected by the committee that produced the "Stricklandian Code". The 10th edition was brought into use in North America soon after the

¹⁹ Such synonymies must be treated with great care as his attributions require change particularly because many more names were brought out of synonymy and accepted as species later in the century; the synonymies in Sharpe (1892) are a more helpful starting point.

²⁰ This, introduced on p. xi and dating from January 1871, was not listed in the *Index Animalium* by Sherborn (1928).

²¹ This is depicted in plate 105 in the *Monograph*.

appearance of the American Ornithologists' Code in 1886 (Melville, 1995: 15), but generally not until after the 7th International Congress of Zoology in 1907. The reversal of the rejection of names from 1758 some decades after Sharpe's *Monograph* creates a need for explanation if kingfisher nomenclature is to be understood.

Linnaeus (1758), in his *Systema Naturae*, listed seven species in his genus *Alcedo*: these were named *ispida*, *erithaca*, *alcyon*, *todus*, *smyrnensis*, *rudis* and *dea* from pages 115 to 116. *Alcedo todus* was a tody (see Peters, 1945: 220) and the name *Alcedo dea* was given to a jacamar (see Peters, 1946: 8). A true kingfisher was mistakenly given the name *Gracula atthis* on p. 109.

Sharpe, as was the normal practice at the time, ignored the 1758 edition of *Systema Naturae* and took the 1766 edition as his basis and in that the following names are listed under *Alcedo* – *cristata* (p. 178), *inda* (p. 179), *ispida* (p. 179), *erithaca* (p. 179), *madagascariensis* (p. 179), *superciliosa* (p. 179), *alcyon* (p. 180), *torquata* (p. 180), *capensis* (p. 180), *senegalensis* (p. 180), *smyrnensis* (p. 181), *rudis* (p. 181), *dea* (p. 181), *paradisea* (p. 181)²² and *galbula* (p. 182).

Adjusting for the switch in base line from 1766 to 1758 requires the following observations:

- (1) *ispida* and *atthis* were seen as very closely related and eventually, with the two treated as sister subspecies, the name *atthis* was given "page precedence" because *Gracula atthis* was published on p. 109 (Laubmann, 1916);
- (2) the name *cristata* had been used by Pallas (1764) two years before Linnaeus (1766); so it was recognised that Pallas was the prior author;
- (3) *superciliosa* Linnaeus, 1766, was shown to be a younger name than *aenea* of Pallas (1764) and precedence passed to Pallas's name;
- (4) the name *erithaca* of Linnaeus (1758) was not retained by Linnaeus (1766) which meant that Sharpe applied the name *tridactyla* of Pallas (1769), and Sharpe (1892) continued its use although listing the name *erythaca* (from Gmelin's 1788 updated version of Linnaeus's *Systema Naturae*) in synonymy, just as he had in January 1869. Precedence was restored *erithacus* only about 1910.
- (5) The name *dea* of Linnaeus used in 1758 and 1766 was recognised as misapplied in *Alcedo*. Hartert in Rothschild & Hartert (1901: 158-160) used the name *Tanysiptera dea* for a kingfisher of the genus *Tanysiptera* found in the Moluccas and recognised several subspecies; but two years later Hartert (1903: 48) discussing the Batjan population realised, from reading the sources cited by Linnaeus (1758) and Linnaeus (1766), that the name *dea* was a name applied to a jacamar in 1758 (also cited to a kingfisher in 1766); this gave Hartert cause to discard the name and he choose to place all these subspecies in *T. hydrochloris*. However, the debate about changing the baseline for zoological nomenclature was under way and Hartert was in favour of the change writing "we now begin our nomenclature 1758 ...". To this Salvadori (1904: 552), responding to Hartert's point that *Alcedo dea* was not a kingfisher, sought to defend it. He argued that Linnaeus (1766: 181) added a reference to Brisson (1760)

²² See observation 5.

– obviously not cited by Linnaeus (1758: 66). Salvadori believed that correction of the 1758 work in 1766 should be accepted and pointed out that in 1766 Linnaeus had simply corrected his mistake – he had restricted the name *dea* to the kingfisher and introduced the name *paradisea* for the jacamar. This view was not accepted and the use of *dea* was adopted for the jacamar.

- (6) The species-group name *todus* was changed to *Todus viridis* Linnaeus (1766: 178) as the author disliked tautonymy. However the name *Todus todus* was tautonymous and unacceptable to Linnaeus in 1766.
- (7) *Alcedo galbula* of 1758 became *Oriolus galbula* in 1766 where Linnaeus (see page 117) did not adopt the Brissonian genus name *Galbula* as his concept of the genus *Alcedo* included the jacamars and the one species of today then known.

THE KNOWN CANCELLANS AND CANCELLANDUM (PL. 40 AND TEXT)

The review in *The Ibis* (Anon., 1869) of parts II and III of the *Monograph* reported a “cancel”. Although Figure 2 (below), which exhibits Sharpe’s explanation, indicated that ‘a slip of paper’ might suffice to correct the name. the volume examined (placed on the Biodiversity Heritage Library (hereafter BHL)²³ by the Ernst Mayr Library, Harvard University, Boston) shows no sign of such a slip of paper²⁴ and the texts for *tridactyla* (pl. 40) and *rufidorsa* (pl. 41) both make mention of the discovery of the problem which Sharpe suggests would be removed by a replacement.

However, Sharpe (1870c: 510) found that he had been using the name *rufidorsa* of Strickland when Strickland’s type specimen proved to be true *rufidorsa*, which the specimen depicted in plate 41 was not. This seems to have been revealed by Pucheran (1861: 341-345). After further consideration he thought it must be “the young bird of *C. tridactyla*”. Sharpe (1892: 179) listed this plate under his entirely new name of *Ceyx euerythra* for which he designated no type locality.²⁵

SUBSEQUENT RELEVANT CHANGES IN IDENTITY DUE TO SHARPE

Chasen & Kloss (1930: 21-22), just back from their visit to British North Borneo, are convinced – from looking at 110 specimens – that *Ceyx erithacus* [sic] and *Ceyx rufidorsus* are distinct species. They list two fresh specimens of *C. e. motley* which they describe as new taxon stating that such birds have mistakenly been called *Ceyx dillwynni* due to the description in Sharpe (1892), but they observe that the specimen depicted in the monograph in plate 43 is quite different and represents an immature plumage of *Ceyx rufidorsus*. This explains the need for the new name *motleyi*. In Sharpe (1892) they consider that the description of *dillwynni* is also inconsistent with *dillwynni* of Sharpe (1869b), which “lacks the blue patch on the side of

²³ See: <https://www.biodiversitylibrary.org/item/137827#page/9/mode/1up>

²⁴ However, such slips are visible in the volume held by Teylers Museum discussed below.

²⁵ There were 22 syntypes from 12 different geographies some broad and some quite well-defined. Sharpe’s synonymy implies that some of these may have borne the names *C. innominata*, *C. dillwynni* or even *Dacelo rufidorsa* (although specimens collected by the authors cited in that instance are unlikely to have reach the British Museum).

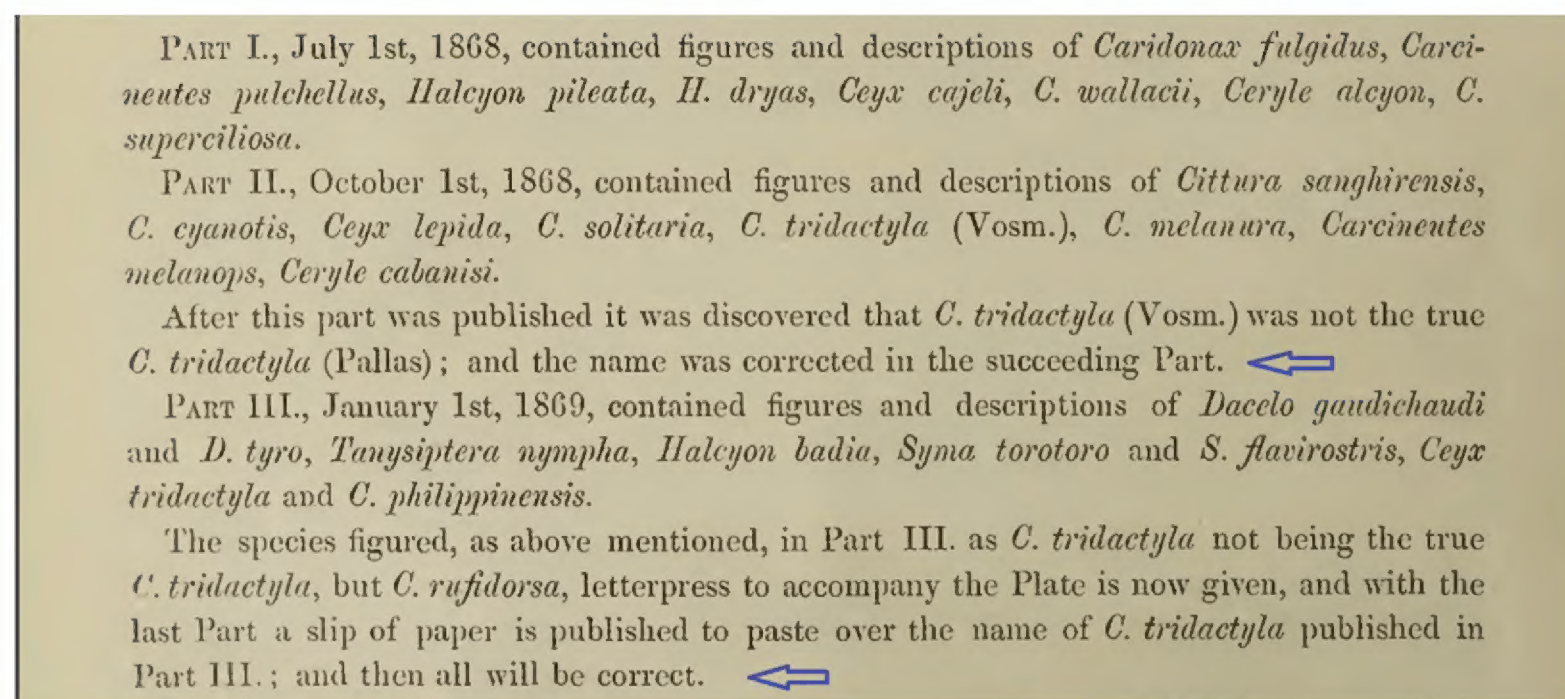


Figure 2. Sharpe, in January 1871, explains the confusion over *Ceyx tridactyla*. Image from p. ii of the Introduction to Sharpe's *Monograph* (from Harvard set on the BHL).

the neck" which they say is present in any state of plumage in *erithacus*, and that true *dillwynni* is a synonym for *rufidorsus*. Peters (1945: 184) followed that view, as others have since. Eventually the puzzling situation in the Malay peninsula and Borneo was resolved when it became clear that some migrants from the population of the south-east Asian mainland from which *motleyi* – based on a male holotype from Bettotan near Sandakan, is distinguished by having "the mantle lilac-rufous instead of black and blue" (Chasen & Kloss, op. cit., p. 106). For further discussion of the taxonomy and nomenclature of *erithacus* and *rufidorsus* see Appendix I.

FURTHER CANCELLANDA AND CANCELLANTIA IN THE PLATES?

In his Introduction (pp. i-ii) Sharpe praised the paintings by Keulemans, but expressed some disappointment with the subsequent colouring. The case of plate 41 originally labelled *Ceyx tridactyla* but corrected to *Ceyx rufidorsa* has been discussed above, but access on-line to <https://www.teylersmuseum.nl/en/collection/books/17c-100-monograph-of-the-alcididae-or-family-of-kingfishers> (the digitised set held by Teylers Museum in Haarlem) reveals that plates 25, 38, 39, 41, 97, 118 and 119 – depicting *Ceryle Cabanisi*, *Ceyx solitaria*, *Ceyx melanura*, *Ceyx rufidorsa*, *Carcineutes melanops*, *Cittura sanghirensis* and *Cittura cyanotis* are represented by pairs of plates. All these originate from Part II (of this part, of which only the eighth plate no. 46, of *Ceyx lepida* appears as a single image). Starting in Part I the plates include a signature by Keulemans which is usually close to foliage at the foot of the plate and not immediately obvious. In the seven pairs one in each pair is signed. The unsigned version shows a heavier use of colour by the colourist and no visible signature and close inspection shows that the title is printed on an added slip. Comparing the work of the colourist it seems clear that it is not the same person; the unsigned plates use much more colour on the bushes or leaves of the trees; the birds themselves, although less often, also use stronger colours and other more subtle differences can be seen.

In the case of *Ceyx rufidorsa* (plate 41) Sharpe explained that the replacement of the picture then titled *Ceyx tridactyla* by one titled *Ceyx rufidorsa* took place in Part III. The Teylers

Museum version labelled *Ceyx rufidorsa* has the name printed on the paper slip but the one in the work displayed by the BHL seems to have the titled printed on the page; which would make that a cancellans of a cancellans (and the displaced cancellans became the second cancellandum). Beside it the second picture is the same with the original title *Ceyx tridactyla* – the replacement picture of *Ceyx tridactyla* depicts two birds and immediately precedes the paired images. The plate in the BHL shows an almost uniformly dark bird unlike the two pictures in the Teylers Museum volume.

The rationale for the other six unsigned plates is unknown. In drawing the picture of the subject it was possible for an artist to demand to see a coloured proof before he would sign the plate. If the artist then approved the work of the colourist he would then add his signature to the stone – possibly also adding some extra lines to help the artist place the colour correctly. The plate would then be printed. Equally we know that plates were sometimes proofed from stones that did not yet carry the title (which gave birth to the term ‘plates before letters’).

So although the rationale is unknown two points, relevant to this unusual situation and based on a relatively superficial review of all the plates in the set on BHL, can be made: (i) Sharpe wrote that he was not entirely happy with the work of the colourist so it is possible that this concern began right at the beginning (and compared to most plates several of the plates issued in Part I seem less well finished); (ii) the quality of all the later plates differs the plant growth is more boldly coloured. The versions lacking signatures would seem to have been intended to test the colourist – essentially a proof. If that is so then if Keulemans approved it – he would add his signature to the plate, potentially making minor modifications to the lines drawn on the plate. Once signed the title would also be added to the stone. The slips that have been stuck on and thus seem to replace a printed title rather than overlay it.²⁶ It seems very possible that the Teylers Museum set contains a unique set of proofs submitted to Keulemans²⁷ and if so then there will have been no additional, but until we know that it remains possible that all were cancellantia!

THE “LITERATURE” SECTION IN THE MONOGRAPH (pp. [xlx]-lxxi)

This section of the monograph lists 142 works that Sharpe consulted and includes his comments on names introduced by others. He often uses the term ‘new species’ but then identifies it as some other known taxon,²⁸ so this repetitive usage should be understood to mean newly proposed name. Three other names were proposed for kingfishers before 1869 and these apparently Sharpe did not manage to consult:

²⁶ With the exception that the two images in the Teylers Museum, the left one labelled *Ceyx rufidorsa* probably does have the name *Ceyx tridactyla* beneath the slip and the right hand image is the cancellandum.

²⁷ Due to the Covid-19 pandemic Teylers Museum has been unable to help; however, future help is expected and it should then be possible to supplement this paper with some of the compared pairs of plates that are shown on their website.

²⁸ Such statements posited synonymy but as there is no confirmation that type specimens were compared these subjective judgements were prone to a need for revision as specimen identities were checked and such checks became more and more essential as specimens accumulated and evidenced variation or misidentification.

Alcyone ruficollaris Bankier, 1841 (a name which Sharpe, 1892 also omitted) ²⁹

Alcedo (Halcyon) coromanda major, Temminck & Schlegel, 1848

Alcedo (Halcyon) coromanda minor, Temminck & Schlegel, 1848

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REFERENCES

Anon., 1868. Recent literature. – *Ibis*, (2) 10: 472-473 [refers to pt. 1 only]

Anon., 1869a. Recent literature. – *Ibis*, (2) 11 15-216 [refers to pts. 2 and 3 only]

Anon., 1869b. Reviews: The Kingfishers. – *American Naturalist*, 3: 149-150. [Notice of its coming publication with a print run of 200 copies and the price set to increase by one fifth after publication, but no mention of Keulemans.]

Anon., 1870a. Recent literature. – *Ibis*, (2) 12: 121-122 [refers to parts 4 to 6, the author advises that Sharpe on Nov. 11, 1869 stated that his use of the name *vintsidoides* was incorrect as the taxon appears to be the *Alcedo cristata* of Linnaeus, so that the species common to Africa proper must be *cyanostigma* of Ruppell. The author also noted that the use of the genus name *Ceycopsis* was based on the views of Salvadori. Refers to "*C. sharpii*".] [Later Sharpe (1892: 120) made clear that this is *Ceryle sharpii* of Gould (and the *Ceryx sharpei* in part 8 of the *Monograph* is Salvadori's name).]

Anon., 1870b. Recent literature. – *Ibis*, (2) 12: 506-507. [Three more parts out – nos. 7 to 9 – but nothing else significant mentioned.]

Anon., 1871. Recent literature. – *Ibis*, (3) 13: 469-470. [parts 7-13 have their content listed.]

Bankier, R.A., 1841. A new species of the Australian genus *Alcyone*. – *Annals and Magazine of Natural History*, (1) 6: 38: 394-395.

Brisson, A.D., 1760. *Ornithologia sive synopsis methodica sistens Avium visionem in ordines Sectiones, Genera, Species ipsarumque Varietates. Cum accurata cujusque speciei descriptione, Citationibus Auctorum de iis tractantium, Nominibus eis ab ipsis E Nationibus impositis, Nominibusque vulgaribus*. 6 vols. – Jean-Baptiste Bauche, Paris.

Chasen, F.N. & C. Boden Kloss, 1929. Some new birds from North Borneo. – *Journal für Ornithologie*, 77 (2): 106-121.

²⁹ Which name has been discussed by Holyoak (1976) and again by Schodde & Holyoak (1997).

Chasen, F.N. & C.B. Kloss, 1930. On a collection of birds from the lowlands and islands of North Borneo. – *Bulletin of the Raffles Museum*, 4: 1-112.

Coues, E. 1879. Third instalment of American ornithological bibliography. – *Bulletin of the United States geological and geographical survey of the territories*. 5 (4) 521-1072 (see p. 710-711).

Dickinson, E.C., 2003. The Howard & Moore complete checklist of the birds of the world, 3rd edition, 1-1039. – Christopher Helm, London.

Dickinson, E.C. & J.V. Remsen, Jr., 2013. The Howard and Moore complete checklist of the birds of the world, 4th edition. 1. Non-passerines, i-l, 1-461. – Aves Press, Eastbourne.

Dickinson, E.C., P. Kamminga, A. Lebossé & S. van der Mije, 2021. Case 3827. Dates of publication of bird names introduced by Coenraad Temminck in the first twenty livraisons of the *Nouveau recueil de planches coloriées* in 1821–1822. – *Bulletin of Zoological Nomenclature*. In Press.

Duncan, F.M., 1937. On the dates of publication of the Society's "Proceedings", 1859 -1926. With an appendix containing the dates of publication of 'Proceedings', 1830-1858, compiled by the late F.H. Waterhouse, and of the 'Transactions', 1833-1869, by the late Henry Peavot, originally published in P.Z.S. 1893, 1913. – *Proceedings of the Zoological Society of London*, 105: 71-83.

Finsch, O., 1870. R.B. Sharpe's Monographie der *Alcedinnidae*. – *Journal für Ornithologie*, 18 (5): 377-380, [Based on 7 parts received by March 1870 and suggesting 13 or 14 will be needed.]

Gould, J., 1869 (October). Description of *Ceryle Sharpii*, a new kingfisher from Gaboon. – *The Annals and Magazine of Natural History*, (4) iv (22): 271.

Hartert, E., 1903. The birds of Batjan. – *Novitates Zoologiae*, 10: 13-64.

"J.E.H." = Harting, J.E., 1910. [Obituary] Dr. R. Bowdler Sharpe. – *Ibis* (7) 5: 352-358.

Holyoak, D.T., 1976. *Halcyon "ruficollaris"*. – *Bulletin of the British Ornithologists' Club*, 96 (1): 40.

Howard, R. & A. Moore (1994). A complete checklist of birds of the world (with new appendix since 1991), i-xxxiv, 1-630 – Academic Press, London.

Laubmann, A., 1916. Zur nomenklatur unseres Eisvogels (*Alcedo ispida* L.). – *Verhandlungen der Ornithologischen Gesellschaft in Bayern*, 12: 238-241.

Lim Haw Chuan, F.H. Sheldon & R.G. Moyle, 2010. Extensive color polymorphism in the southeast Asian oriental dwarf kingfisher *Ceyx erithaca*: a result of gene flow during population divergence? – *Journal of Avian Biology*, 41: 305-318.

Linnaeus, C., 1758. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis*, 1-824 – Laurentii Salvii, Holmiae.

Linnaeus, C., 1766. *Systema naturae per regna tria naturae secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis*, 1: 1-532. – Laurentii Salvii, Holmiae.

Mann, C.F., 2008. *The Birds of Borneo. An Annotated Checklist*. British Ornithologists' Union Checklist no. 23, i-xvi, 1-440. – British Ornithologists' Union/British Ornithologists' Club, Peterborough, U.K.

Melville, R.V., 1995. *Towards stability in the names of animals. A history of the International Commission on Zoological Nomenclature 1895-1995*, i-xii, 1-92. – International Trust for Zoological Nomenclature, London.

Moyle, R.G., 2006. A molecular phylogeny of kingfishers (Alcedinidae) with insights into early biogeographic history. – *Auk*, 123 (2): 487-499.

Moyle, R.G., J. Fuchs, É. Pasquet & B.D. Marks, 2007. Feeding behavior, toe count, and the phylogenetic relationships among alcedinine kingfishers (Alcedininae). – *Journal of Avian Biology*, 38: 317-326.

Pallas, P.S., 1764. *Adumbratiunculae Avium variarum praecedenti Elencho insertarum, sed quae in Systemate Naturae Illustr. Linnaei nondum extant*", pp. 1-7. In: Vroeg, M. A. Catalogue raisonné d'une collection

supérieurement belle d'Oiseaux, tant exotique qu'Européens, de Quadrupèdes et d'Insectes. Empaillés & arrangés avec beaucoup d'art en situations & attitudes extrêmement naturelles, & granatis de la corruption d'une façon particulière. Le tout rassemblé & arrangé, pendant une longue suite d'années, avec beaucoup de peines & à grand frais.

Pallas, P.S., 1767. *Spicilegia Zoologica quibus novae imprimis et obscurae animalium species iconibus, descriptionibus atque comentariis illustrantur*. – Gottl. August. Lange, Berolini.

Peters, J.L., 1945. *Check-list of birds of the world*, 5: i-xi, 1-306. – Harvard University Press. Cambridge, Massachusetts.

Peters, J.L., 1948. *Check-list of birds of the world*, 6: i-xi, 1-259. – Harvard University Press. Cambridge, Massachusetts.

Pucheran, J., 1861 ('Aout'). Observations rectificatives sur quelques espèces d'oiseaux. – *Revue et Magasin de Zoologie*, (2) 13: 337-346.

Ripley, S.D., 1942. A revision of the kingfishers, *Ceyx erithacus* and *rufidorsus*. – *Zoologica*, 27 (10): 55-59.

Ripley, S.D. & B.M. Beehler, 1987. Species status of the Malaysian three-toed kingfisher. – *Bulletin of the British Ornithologists' Club*, 107: 145-151.

Rothchild, W. & E. Hartert, 1901. Notes on Papuan birds. II. – *Novitates Zoologiae*, 8: 102-163.

Salvadori, T., 1869. Monografia del Genere *Ceyx* Lacépède. – *Atti della Reale Accademia delle Scienze di Torino*, 4: 440-476. [Describes *Ceyx sharpei* from Borneo]

Salvadori, T., 1874. Catalogo sistematico degli uccelli di Borneo con note ed osservazioni di G. Doria ed O. Beccari intorno alle specie da essi raccolte nel Ragiato di Sarawak. – *Annali del Museo di Storia Naturale di Genova*, 5: 1-429.

Salvadori, T., 1904. On *Tanysiptera dea*. – *Ibis*, (8) 4: 551-554.

Salvin, O. & P.L. Sclater, 1872. Index of the ornithological literature of 1870. – *Ibis* (3) 2: 417-484.

Schodde, R. & D.T. Holyoak, 1977. Application of *Halcyon ruficollaris* Holyoak and *Alcyone ruficollaris* Bankier. – *Bulletin of the British Ornithologists' Club*, 97 (1): 32.

Sharpe, R.B., 1868a. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. I. – The author, London. [July 1, 1868] [New: *Ceyx wallacii*]

Sharpe, R.B., 1868b. On two new or little-known kingfishers belonging to the genera *Ceyx* and *Cittura*. – *Proceedings of the Zoological Society of London*, 36 (2): 270-272. [September, 1868] [New: *Cittura sanghirensis* p. 271; 'New' *Ceyx wallacii* p. 270]

Sharpe, R.B., 1868c. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. II. – The author, London. [October 1, 1868]

Sharpe, R.B., 1869a. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. III. – The author, London. [January 1, 1869]

Sharpe, R.B., 1869b. On the genus *Ceyx*. – *Proceedings of the Zoological Society of London*, 36 (3): 587-599 [March, 1869]³⁰ [New: *Ceyx dillwynni* p. 591]

Sharpe, R.B., 1869c. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. IV. – The author, London. [April 1, 1869]

Sharpe, R.B., 1869d. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. V. – The author, London. [July 1, 1869]

³⁰ For date of publication see Duncan (1937).

- Sharpe, R.B., 1869e. On the genus *Alcyone*. – *Proceedings of the Zoological Society of London*, 37 (2): 351-357. [September 1869] [No novelties described.]
- Sharpe, R.B., 1869f. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. VI. – The author, London. [October 6, 1869]
- Sharpe, R.B., 1870a. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. VII. – The author, London. [January 1, 1870]
- Sharpe, R.B., 1870b. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. VIII. – The author, London. [April 1, 1870] [New: *Pelargopsis gouldi*, *Pelargopsis burmanica*, *Pelargopsis floresiana*]
- Sharpe, R.B., 1870c. Additional notes on the genus *Ceyx*. – *Proceedings of the Zoological Society of London*, 37 (2): 507-511. [April [30], 1870]
- Sharpe, R.B., 1870d. On a new kingfisher, belonging to the genus *Tanysiptera*. – *Proceedings of the Zoological Society of London*, 37 (3): 630-631. [April [30], 1870] ['New': *Pelargopsis gouldi*, *Pelargopsis burmanica*, *Pelargopsis floresiana*]
- Sharpe, R.B., 1870e. On the genus *Pelargopsis* Gloger. – *Proceedings of the Zoological Society of London*, 38 (1): 61-67. [June [30], 1870]
- Sharpe, R.B., 1870f. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. IX. – The author, London. [July 1, 1870]
- Sharpe, R.B., 1870g. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. X. – The author, London. [October 1, 1870]
- Sharpe, R.B., 1870h. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. XI. – The author, London. [October 1, 1870]
- Sharpe, R.B., 1870i. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. XII. – The author, London. [November 1, 1870]
- Sharpe, R.B., 1870j. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. XIII. – The author, London. [December 1, 1870]
- Sharpe, R.B., 1871a. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. XIV. – The author, London. [January 1, 1871] [New: *Tanysiptera emiliae* p. 265]³¹
- Sharpe, R.B., 1871b. *A monograph of the Alcedinidæ: or family of kingfishers*. Part. XV. – The author, London. [January 1, 1871]
- Sharpe, R.B., 1892. *Catalogue of the birds in the British Museum*. XVII. *Catalogue of the Picariæ in the collection of the British Museum*. *Coraciæ (cont.) and Halcyones (part)*. *Leptosomatidæ, Coraciidæ, Meropidæ, Alcedinidæ, Momotidæ, Todidæ, and Coliidæ*, i-x, 1-346. – London, Trustees of the British Museum (Nat. Hist.).
- Sharpe, R.B., 1906. *Birds*. In: *The history of the collections contained in the natural history departments of the British Museum*, 2: 79-515. – Trustees of the British Museum, London.
- Sherborn, C.D., 1928. *Index animalium sive index nominum quæ ab A.D. MDCCLVIII generibus et speciebus animalium impositæ sunt*. 1801-1850. XVII. munda - nyx. 4195-4450. – Trustees of the British Museum, London.
- Sims, R.W., 1959. The *Ceyx erithacus* and *rufidorsus* species problem. – *Zoological Journal of the Linnean Society, London*, 44: 212-221.

³¹ This may have been in or intended to be in part XV. Zimmer (1926) considered it was part of part XIV and perhaps found this information in the *Zoological Record*. I have not seen any parts wrappers.

Smythies, B.E., 1981. The Birds of Borneo (edited by Lord Cranbrook). i-xiv, 1-473. – The Sabah Society and the Malayan Nature Society, Kuala Lumpur.

Smythies, B.E., 1999. The Birds of Borneo. (edited by G. W. H. Davison), i-xii, 1-710. – Natural History Publications (Borneo), Kota Kinabalu.

Strickland, H.E., J. Phillips, J. Richardson, R. Owen, L. Jenyns, W.J. Broderip, J.S. Henslow, W.E. Schuckard, G.R. Waterhouse, W. Yarrell, C. Darwin and J.O. Westwood, 1843. Report of a Committee appointed to consider of the Rules by which the nomenclature of zoology may be established on a uniform and permanent basis. – *Report of the twelfth meeting of the British Association for the Advancement of Science (Manchester, 1842)*: 105-121.

Temminck, C.J. & H. Schlegel, 1844-1850. *Fauna Japonica sive Descriptio animalium, quae in itinere per Japoniam, jussu et auspiciis superioru , qui summum in India, Batava Imperium Tenent suscepto, annis 1823-1830 collegit, notia, observationibus et adumbrationibus illustravit. Aves.* 1-141. – P. F. d. Siebold, Apud Arnz et Socios, Lugduni Batavorum.

Voous, K.H., 1951. Distributional and evolutionary history of the Kingfisher genus *Ceyx* in Malaysia. *Ardea*, 39: 182-196.

Wells, D. R., 1999. *The Birds of the Thai-Malay Peninsula*, 1: i-liii, 1-648. – Academic Press, London.

Woodall, P.F., 2001. Family Alcedinidae (Kingfishers), pp. 130-249. In: del Hoyo, A. Elliott and J. Sargatal (eds.). *Handbook of the birds of the world*. 6. – Lynx Edicions, Barcelona.

Zimmer, J.T., 1926. Catalogue of the Edward E. Ayer Ornithological Library. – *Field Museum of Natural History. Zoology Series*, 16 (2): 365-706.

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APPENDIX I:

TREATMENT OF *CEYX ERITHACUS* FROM 1945 TO 2013

Peters (1945: 184) treated a species *Ceyx erithacus* with *rufidorsum* [sic] as a subspecies listing *dillwynni*, *sharpei*, *innominata*, *euerythra* and *robusta* as synonyms yielding a range focussed on the Greater and Lesser Sundas with the Malay Peninsula and a western element of the Philippines included. This followed recognition that the name *euerythra* had been based on anomalous individuals and that Strickland's name *rufidorsum* was the oldest name for such a population. It also came later than the report by Chasen & Kloss (1930) in which the authors will 110 specimens before them treated as either *C. erithacus* or *C. rufidorsus*, The latter they saw as in no need of subspecies, while *erithacus* is represented by the nominate from in the Malay peninsula and in Sumatra and by *motley* in Borneo and, strangely, in Nias off western Sumatra. They do mention others specimens saying that they believed to be different stages of immaturity in *C. erithacus*.

Ripley (1942), Voous (1951), Sims (1959) and Ripley & Beehler (1987) all commented on the complicated and apparently overlapping populations in the Malay Peninsula, Sumatra and Borneo deriving from of black-backed northern stock, and the rufous-backed birds more typical of birds in islands to the south; and Sims hypothesized the case for secondary contact,

The arrangement by Peters was maintained by Howard & Moore (1994: 166), but following Wells (1999), even *rufidorsus* (the genus *Ceyx* being masculine in gender) was subsumed into nominate *erithacus* along with *captus*, *vargasi* and *jungei* by Woodhall (2001: 229-230). Both he and Dickinson (2003: 290) listed just the remaining three subspecies (*erithacus*, *macrocarus* and *motley*).

Moyle (2006) investigated the molecular evidence for the whole family of kingfishers and found that the genera *Alcedo* and *Ceyx* shared a single clade but the few species then sampled prevented lumping *Ceyx* in *Alcedo*, but the broader study by Moyle *et al.* (2007) resolved that placing *pusillus*, *azureus* and *websteri* in *Ceyx*.

Lim *et al.* (2010) in a study that excluded probable migrants³² and subadults offered support for the idea that the inter-breeding of black-backed and red-backed birds had occurred after an earlier separation had differentiated the two populations. They suggested that this period of interbreeding was between 2 and 3 m.y.a. and that interbreeding between the two original types was probably not now recurring. This can be construed as two good species making contact – it being suggested that this was secondary contact. The authors present the information in the context of the species *erithacus* without attaching subspecific names or addressing whether treating Bornean *motley* as a valid subspecies can be sustained. As pointed out by Mann (2008), Ripley & Beehler (1987) and Smythies (1999) supported the idea that two species were interbreeding. Dickinson & Remsen (2013: 337) retained a single species, but failed to update the relevant footnotes.

³² Smythies (1981) believed that some nominate *erithacus* reach Borneo on migration.

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